

IN THE CLAIMS:

Please amend the claims as follows:

Claims 1 to 85 (Cancelled)

86. (New) An apparatus that stores data and attempts to protect said data from storage errors, comprising an array of disk drives, each of said disk drives having a plurality of storage blocks;

wherein at least some of said storage blocks store at least data, one or more block numbers, and one or more checksums, with at least one of said checksums being at least partially for at least one of said block numbers.

87. (New) The apparatus as in claim 86, wherein said one or more checksums include a first checksum for said data and a second checksum for said first checksum and said at least one of said block numbers.

88. (New) The apparatus as in claim 87, wherein said one or more block numbers include a virtual block number and a disk block number.

89. (New) The apparatus as in claim 87, wherein at least some of said storage blocks store parity data for those of said storage blocks that store said data, said one or more block numbers, and said one or more checksums.

90. (New) The apparatus as in claim 89, wherein said parity data can be used to correct errors detected using said one or more checksums.

91. (New) The apparatus as in claim 86, wherein said one or more checksums are block appended checksums.

92. (New) The apparatus as in claim 86, wherein said disk drives are hard disks.

93. (New) The apparatus as in claim 86, wherein each of said storage blocks includes plural disk sectors.

94. (New) The apparatus as in claim 93, wherein at least one of said one or more checksums for a storage block resides in one of the sectors of that storage block and is at least partially for data in others of the sectors in that storage block.

95. (New) The apparatus as in claim 86, wherein said disk drives are part of a RAID storage device.

96. (New) The apparatus as in claim 95, wherein said RAID storage device is a RAID level 4 device.

97. (New) A method of storing data and attempting to protect said data from storage errors in an array of disk drives that each have a plurality of storage blocks, comprising steps of
determining data for a storage block;
determining one or more block numbers for said storage block;
determining one or more checksums for said storage block; and
storing at least said data, said one or more block numbers, and said one or more checksums in said storage block;
wherein at least one of said checksums is at least partially for at least one of said block numbers.

98. (New) The method as in claim 97, wherein said one or more checksums include a first checksum for said data and a second checksum for said first checksum and said at least one of said block numbers.

99. (New) The method as in claim 98, wherein said one or more block numbers include a virtual block number and a disk block number.

100. (New) The method as in claim 98, further comprising a step of storing parity data in at least some of said storage blocks, said parity data for those of said storage blocks that store said data, said one or more block numbers, and said one or more checksums.

101. (New) The method as in claim 100, wherein said parity data can be used to correct errors detected using said one or more checksums.

102. (New) The method as in claim 97, wherein said one or more checksums are block appended checksums.

103. (New) The method as in claim 97, wherein said disk drives are hard disks.

104. (New) The method as in claim 97, wherein each of said storage blocks includes plural disk sectors.

105. (New) The method as in claim 104, wherein at least one of said one or more checksums for a storage block resides in one of the sectors of that storage block and is at least partially for data in others of the sectors in that storage block.

106. (New) The method as in claim 97, wherein said disk drives are part of a RAID storage device.

107. (New) The method as in claim 106, wherein said RAID storage device is a RAID level 4 device.